

FIG. 1A

[illegible]

FIG. 1B

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GGGCCCCGTA CTTCGCACCCCCATA CGAGCCCTTCCCGACGGAGTGC GTTCTCTATGA
-----+-----+-----+-----+-----+-----+-----+-----+-----+
CCCGGGCATGA AGCGTGGGGGTATGCTCGGGGAAGGCTGCCCTCAGCGCA AAGAGATACT
G P Y F A P P Y E P L P D G V R F F Y E
240                               260                               280

AGGAAGCCCTGTGAGATTGAGCGTGCCAGCGGAGGAGGTCCCCACTTTTATGGGAGGAT
-----+-----+-----+-----+-----+-----+-----+-----+-----+
TCCTTCGGGACACTCTAACTCGCACGGTCGCCCTCCTCCAGGGGTGAAAAATACCCCTCCTA
G R P V R L S V P P A E E V P T F Y G R M
300                               320                               340

GTTAGATCATGAATACACAACAAGGAGGTTTCCGGGAAGAACTTCTCAATGACTGGCG
-----+-----+-----+-----+-----+-----+-----+-----+-----+
CAATCTAGTACTTATGTGTGTTTCCTCCAAAAGGCCCTTCTTGAAGAAGTTACTGACCCGC
L D H E Y T T K E V F R K N F F N D W R
360                               380                               400

AAAGGAAATGGCGGTGGAAGAGAGAGGGAAGTCATCAAGAGCCCTGGACAAGTGTGACTTCAC
-----+-----+-----+-----+-----+-----+-----+-----+-----+
TTTCCTTTACCGCCACCTTCTCTCCCTTCAGTTAGTTCTCGGACCTGTTCACACTGAAGTG
K E M A V E E R E V I K S L D K C D F T
420                               440                               460

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FIG. 1C

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      .      .      .      .      .      .      .      .      .      .
GGAGATCCACAGATACTTTGTGGACAAGGCCGACGCCGGAAGTCTCTGAGCAGGGAGGA
-----+-----+-----+-----+-----+-----+-----+-----
CCTCTAGGTGCTATGAACACCTGTTCGGCGTCCGGCCTTTCAGGACTCGTCCCTCCT
E I H R Y F V D K A A A R K V L S R E E
480                                520

      .      .      .      .      .      .      .      .      .      .
GAAGCAGAAGCTAAAGAAGAGGCGAGAAAACCTCAGCAAGAGTTCGGCTACTGTATTTT
-----+-----+-----+-----+-----+-----+-----+-----
CTTCGTCTTCGATTTTCTCTCCGCTCTTTTGAAGTCGTCTCAAGCCGATGACATAAAA
K Q K L K E E A E K L Q Q E F G Y C I L
540                                580

      .      .      .      .      .      .      .      .      .      .
AGATGGTCACCAAGAAAAATAGGCAACTTCAAGATTGAGCCGCCCTGGCTTGTTCCGTGG
-----+-----+-----+-----+-----+-----+-----+-----
TCTACCAAGTGGTTCTTTTATCCGTTGAAGTTCTAACTCGGGCGGACCGAACAAGGCACC
D G H Q E K I G N F K I E P P G L F R G
600                                640

      .      .      .      .      .      .      .      .      .      .
CCGTGGCGACCATCCCAAGATGGGGATGCTGAAGAGAAGGATCACGCCAGAGGATGTGTT
-----+-----+-----+-----+-----+-----+-----+-----
GGCACCGCTGGTAGGGTTCTACCCCTACGACTTCTCTTCTTAGTGGGTCTCCTACACCA
R G D H P K M G M L K R R I T P E D V V
660                                700

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FIG. 1D

TATCAACTGCAGCAGGACTCGAAGATCCCCGAGCCCGCGCGGCGGACCAAGTGGAAAGGA
 ATAGTTGACGTCGTCCTGAGCTTCTAGGGGCTCGGGGGCGCCCGGTGCTCACCTTCCTT
 I N C S R D S K I P E P P A G H Q W K E
 720 740 760

GGTGGCTCCGATAACACCGTCAAGTGGCTGGCAGCTTGGACCGAGAGCGTTCAGAACTC
 CCACGCGAGGCTATGTGGCAGTGACCGACCGTCGAACCTGGCTCTCGCAAGTCTTGAG
 V R S D N T V T W L A A W T E S V Q N S
 780 800 820

CATCAAGTACATCATGCTGAACCCCTTGCTCGAAGCTGAAGGGGAGACAGCTTGGCAGAA
 GTAGTTCATGTAGTACGACTTGGGAACGAGCTTCGACTTCCCCCTCTGTGCAACCGTCTT
 I K Y I M L N P C S K L K G E T A W Q K
 840 860 880

GTTTGAAACAGCTCGACGCCTGCGGGGATTGTGGACGAGATCCGCTCCCAGTACCGGGC
 CAAACTTTGTGAGCTGCGGACGCCCTTAAACACCTGCTCTAGGCGAGGTCATGGCCCCG
 F E T A R R L R G F V D E I R S Q Y R A
 900 920 940

FIG. 1E

TGACTGGAAGTCTCGGGAAATGAAGACGAGACGGCGGTGCCCTGTATTTCATCGA
-----+-----+-----+-----+-----+-----
ACTGACCCTCAGAGCCCTTTACTTCTGCTCTGTCGCCCGCCACGGGCATAAAGTAGCT
D W K S R E M K T R Q R A V A L Y F I D
960 980 1000

TAAGCTGGCACTGAGAGCAGGAATGAGAAGGAGGACCGTGAGCGGCCGACACCGTG
 ATTCGACCGTGACTCTCGTCCTTTACTCTTCTCTCCACTCGCGCGCTGTGGCACCC
 K L A L R A G N E K E D G E A A D T V G
 1020 1040 1060

[illegible]

CGTGTGGAATTTGACTTCCTGGGAAGGACTGCA'TCCGCTACTACAACAGAGTCCGGT
-----+-----+-----+-----+-----+
GCACCACCTTAAGTGAAGACCCCCTTCCTGACGTAGGGATGATGTTGTCTCACGGCCA
V V E F D F L G K D C I R Y Y N R V P V
1140 1160 1180

FIG. 1F

GGAGAGCCGGTGTACAAGAACTTACAGCTCTTTATGGAGAACCAAGGACCCCGGGACCA
 CCTCTTCGGCCACATGTTCTTGAATGTCGAGAAATACCTCTTGTTCTGGGGCCCTGCT
 E K P V Y K N L Q L F M E N K D P R D D
 1200 1220 1240

CCTCTTCGACAGGCTGACCACGACCAGCCCTGAACAAGCACCTCCAGGAGCTGATGGACCG
 ---+---+---+---+---+---+---+---+---+---+---+---+
 GGAGAAGCTGTCCGACTGGTGTGGTGGACTTGTTCTGTTGGAGGTCTCGACTACCTGCC
 L F D R L T T T S L N K H L Q E L M D G
 1260 1280 1300

GCTGACGGCCAAGGTGTTCCGGACCTACAACGCCCTCCATCTGCAGGAGCAGCTGCCG
 CGACTGCCCGGTCCACAAAGCCCTGGATGTTCCGGAGGTAGTGAGACGTCCTCGTCGACGCC
 L T A K V F R T Y N A S I T L Q E Q L R
 1320 1340 1360

GGCCCTGACGCCGCCGAGCAGCATAGCAGCTAAGATCTTATCCTACAACCAGCCAA
-----+-----+-----+-----+-----+-----+
CCGGACTGC CGCGCGCTCCTGTTCGTATCGTCGATTCTAGAATAGGATGTTGGCTCGGTT
A L T R A E D S I A A K I L S Y N R A N
1380 1400 1420

FIG. 1G

CCGAGTCGTGGCCATTCTCTGCAACCATCAGCGAGCAACCCCAGTACGTTGCAGAAGTC
-----+-----+-----+-----+-----+-----+-----+
GGCTCAGCACCGGTAAAGACGTTGGTAGTCGCTCGTTGGGGTCATGCAAGCTCTTCAG
R V V A I L C N H Q R A T P S T F E K S
1440 1460 1480

.
 GATGCAGAATCTCCAGACGAAGATCCAGGCAAGAGGAGCAGGTGGCTGAGGCCAGGGC
 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----
 CTACGTCTTAGAGGTCTGCTTCTAGGTCGTTCTCTCCTCGTCCACCGACTCCGGTCCCCG
 M Q N L Q T K I Q A K K E Q V A E A R A
 1500 1520 1540

AGAGCTGAGGAGGGCTGAGCACAAAGCCCAAGGGATGGCAAGTCCAGGAGTGT
 TCTCGACTCCTCCCGCTCCGACTCGTGTTCGGGTTCCTTACCGTTCAGGTCCTCACA
 E L R R A R A E H K A Q G D G K S R S V
 1560 1580 1600

CCTGGAGAAGAGCGGCTCCTGGAGAGCTGCAGGAGCAGCTGGCGCAGCTGAGTG
 GGACCTCTTCTTCGCGGAGGACCTCTTCGACGTCTCTCGTCCGCGTCCGACTCACA
 L E K K R R L L E K L Q E Q L A Q L S V

FIG. 1H

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GCAGGCCACGGACAAGGAGAGAACAAGCAGGTGGCCCTGGGCACGTCCAAGCTCAACTA
-----+-----+-----+-----+-----+-----+-----+-----+
CGTCCGGTGCCCTGTTCCCTCCTCTGTTCCGTCCACCCGGACCCCGTGCAGGTTCGAGTTGAT
Q A T D K E E N K Q V A L G T S K L N Y
1680 1700 1720
CCTGGACCCCAAGGATCAGCATTCGCCTGGTGCAGCGGTTCCAGGGTCCAGTGGAGAGAT
-----+-----+-----+-----+-----+-----+-----+-----+
GGACCTGGGGTCCTAGTCGTAACGGACCACCGTTCCGCCAAGTCCCACGGTCACCTCTCTA
L D P R I S I A W C K R F R V P V E K I
1740 1760 1780
CTACAGCAAAACACAGCGGGAGAGAGTTCCGCCTGGGCTCTCGCCATGGCAGAGAGACTT
-----+-----+-----+-----+-----+-----+-----+-----+
GATGTCGTTTGTGTCGCCCTCTCCAAGCGGACCCGAGAGCGGTACCGTCCCTCTCTGAA
Y S K T Q R E R F A W A L A M A G E D F
1800 1820 1840
TGAATTCTAACGACGAGCCGTGTGAAACTTCTTTTGTATGTGTGTGTGTTTTTCCT
-----+-----+-----+-----+-----+-----+-----+-----+
ACTTAAGATTGCTGCTCGGCACAACTTTGAAGAAAACATACACACACACAAAAAAGTGA
E F * 1880 1900
ATTAAGCAGTACTGGGGAATTGTACATAAAAAAATAAAAAAATAAAAAA
1860
TAATTTCGTCATGACCCCTTAAACATGTTATTTTTCCTTTTTCCTTTTTCCTTTT
-----+-----+-----+-----+-----+-----+-----+-----+

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FIG. 2A

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VRLRLRAALT.....LGEVRRPAS
: . | | | . . .
IKPLKRPRDEDDVDYKPKIKTEDTKKEKKRKL EEEEDGKLKPKNKDKD

RGVPGSRRTQKSG.....ARWEKEKHEDGVKWRQLEHKGPYFAPPYE
: | | . . . | . : | | . . . : | | | | | | | | | |
KKVPEPDNKKKKPKKEEEQKWKWWEERYPEGIKWKFL EHKGPVFAPPYE

PLPDGVRFYEGRPVRLSVPAEEVPTFYGRMLDHEYTTKEVFRKNFFNDW
| | | . : | | : | | . . . : | | : | | | | | | | | | |
PLPENVKFYDGVKVMKLSPKAEVATFFAKMLDHEYTTKEIFRKNFFKDW

RKEMAVEEREVIKSLDKCDFTEIHRVFVDKAAARKVLSREKQKLKEEAE
| | | . | | : . : | | | | | . : | | . . . : | | : | | | |
RKEMTNEEKNIITNLSKCDFTQMSQYFKAQTEARKQMSKEEKLKIKEENE

KLQQEFGYCILDGHQEKIGNFKIEPPGLFRGRGDHPKMGLKRRITPEDV
| | . : | | : | | . : | | | | | | | | | | | | | | | |
KLLKEYGFCIMDNHKERIANFKIEPPGLFRGRGNHPKMGLKRRIMPEDI

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FIG. 2B

[illegible]

SKLKGETAWQKFETARRLRGFVDEIRSQYRADWKSREMKTRQRAVALYFI
 1::111..111:11111: 11.111.1111:111.111111111
 SRIKGEKDWOQYETARRLKKCVDKIRNQYREDWKSSEMKVRQRAVALYFI

DKLALRAGNEKEDGEAADTVGCCSLRVEHVQLHPEADGCQHVVFFDLGK
 DKLALRAGNEKEEGETADTVGCCSLRVEHINLHPELDGQEYVVEFFDLGK

DCIRYYNRVPVEKPVYKNLQLFMENKDPRDDLFDRLLTTSLNKHLLQELMD
|:||||:|||||. |:||||||| |:|||||. |:|||||. |:
DSIRYYNKVPVEKR VFKNLQLFMENKQPEDDLFDRLLTGILNKHLLQDLME

